8-Sided or Octagon Marking Gauge

by Bob Smalser, Seabeck, WA

All the descriptions I've ever read on these needed a good picture to make them comprehensible, so I thought since I made another one recently, I'd take some photographs.

These gadgets mark square or rectangular stock into eight sides, dividing each face of the stock into three equal sections...the first step in planing a cylinder from a square. The nice feature of this design is that it accommodates tapered stock, so is perfect for the spars and the oars I am making here.

Cut a block the diameter of the largest cross section of your finished spar or loom...draw a circle in it so the circle intersects the edges. Then use a 45° square to make an octagon of it...keeping outside of your pencil lines.

Another block an inch wide and a couple inches longer than the first block is laid atop…both the edges of the circle and the corners of the octagon are transferred to the second block, holes drilled for nails and pencil…and you have your gauge.

Offset the holes for the guide nails to insure they are outboard of the circle.

Then merely keep the guide nails in contact with the edges of your stock, and you can mark any tapered piece into an octagon for planing. In traditional construction, spars and looms are thought to look best if the faces of the octagon have a ratio of 5-7-5 instead of 1-1-1, and many go to a lot of trouble making gages that mark those offset lines. My approach is simpler…I mark a perfect octagon and then plane either outside or inside of my marked lines to get the look I want:

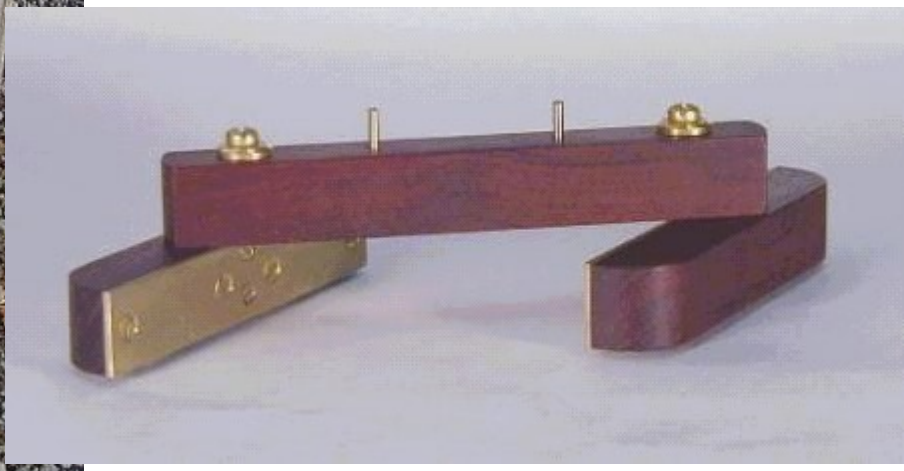
Samples of round and octagonal pieces

To bring your octagon into a round, simply plane your 8-sides into 16 sides. This is easily done by eye without any additional marking. Then once you have 16 sides, you can use any spoke shave, block plane, or smoothing plane to whittle those 16 sides into round followed by sanding.

...or you can use use a spar

plane to go from eight sides to round in one pass (see my article; **Making a Spar Plane Inexpensively** on making them—it's easy)…

The beauty of spar planes is that with a sharp blade and straight grain, sanding isn't required at all.



And these 8-siding gauges don't have to be crude like mine.

Boatbuilder Jon Etheredge sent me a pic of his shop-made marking gauge, a copy of a rare beauty in the Mystic Seaport Museum, which I have filed away to make one rainy winter day.